

Title (en)

METHOD AND DEVICE FOR DETERMINING A LEVEL OF VENTILATORY ASSIST TO A PATIENT

Title (de)

VERFAHREN UND VORRICHTUNG ZUR BESTIMMUNG EINES BEATMUNGSUNTERSTÜTZUNGSNIVEAUS FÜR EINEN PATIENTEN

Title (fr)

PROCÉDÉ ET DISPOSITIF DE DÉTERMINATION D'UN NIVEAU D'ASSISTANCE VENTILATOIRE À UN PATIENT

Publication

**EP 2381992 A4 20150225 (EN)**

Application

**EP 10730997 A 20100114**

Priority

- CA 2010000043 W 20100114
- US 19398709 P 20090115

Abstract (en)

[origin: WO2010081223A1] A method and device for determining a level of ventilatory assist to be delivered to a patient by a mechanical ventilator in response to a measure of a patient's neural respiratory drive multiplied by an amplification factor, wherein an existing predicted ventilatory assist pressure is calculated and an existing resulting pressure delivered to the patient by the mechanical ventilator is measured. The amplification factor is changed from an existing amplification factor to a new amplification factor, a new predicted ventilatory assist pressure is calculated using the new amplification factor, and a new resulting pressure delivered to the patient by the mechanical ventilator after the amplification factor has been changed is measured. The new and existing predicted ventilatory assist pressures are compared to determine an anticipated change in pressure that will be delivered to the patient, and the new and existing resulting pressures are compared to determine an actual change in pressure delivered to the patient by the mechanical ventilator. The anticipated and actual changes in pressure are compared and a decision to increase, maintain or decrease the amplification factor is delivered in response to the comparison between the anticipated change and the actual change in pressure.

IPC 8 full level

**A61M 16/00** (2006.01); **A61B 5/08** (2006.01); **A61B 5/288** (2021.01)

CPC (source: EP US)

**A61M 16/0051** (2013.01 - US); **A61M 16/026** (2017.07 - EP US); **A61B 5/08** (2013.01 - EP US); **A61B 5/389** (2021.01 - EP);  
**A61M 2016/0027** (2013.01 - EP US)

Citation (search report)

- [A] EP 1204439 A1 20020515 - UNIV MONTREAL [CA]
- [A] WO 2007082384 A1 20070726 - MAQUET CRITICAL CARE AB [SE], et al
- [A] JADRANKA SPAHIJA ET AL: "Closed-Loop Control of Respiratory Drive Using Pressure-Support Ventilation", AMERICAN JOURNAL OF RESPIRATORY AND CRITICAL CARE MEDICINE, vol. 171, no. 9, 1 May 2005 (2005-05-01), pages 1009 - 1014, XP055162392, ISSN: 1073-449X, DOI: 10.1164/rccm.200407-856OC
- See references of WO 2010081223A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

**WO 2010081223 A1 20100722**; CN 102355919 A 20120215; CN 102355919 B 20150617; EP 2381992 A1 20111102; EP 2381992 A4 20150225; EP 2381992 B1 20190227; US 2012006327 A1 20120112; US 8881725 B2 20141111

DOCDB simple family (application)

**CA 2010000043 W 20100114**; CN 201080012048 A 20100114; EP 10730997 A 20100114; US 201013144129 A 20100114